

Amendments to the Specification:

The paragraph beginning at Page 1, lines 7-37 through to Page 2, lines 1-14, to be amended as follows:

--Various methods, systems and apparatus relating to the present invention are disclosed in the following co-pending applications filed by the applicant or assignee of the present invention on September 15, 2000:

09/663,5796,679,420 (now granted), 09/663,701 (now pending), 09/663,6406,720,985 (now granted)

The disclosures of these co-pending applications are incorporated herein by reference.

Various methods, systems and apparatus relating to the present invention are disclosed in the following co-pending applications filed by the applicant or assignee of the present invention on 30 June 2000:

<u>09/609,139, (now pending)</u>	<u>09/608,970, (now pending)</u>	<u>09/609,0396,678,499, (now granted)</u>
<u>09/607,852, (now pending)</u>	<u>09/607,656, (now pending)</u>	<u>09/609,132, (now pending)</u>
<u>09/609,303, (now pending)</u>	<u>09/610,095, (now pending)</u>	<u>09/609,596, (now pending)</u>
<u>09/607,843, (now pending)</u>	<u>09/607,605, (now pending)</u>	<u>09/608,178, (now pending)</u>
<u>09/609,553, (now pending)</u>	<u>09/609,233, (now pending)</u>	<u>09/609,149, (now pending)</u>
<u>09/608,022, (now pending)</u>	<u>09/609,232, (now pending)</u>	<u>09/607,844, (now pending)</u>
<u>6,457,883, (now granted)</u>	<u>09/608,920, (now pending)</u>	<u>09/607,985, (now pending)</u>
<u>6,398,332, (now granted)</u>	<u>6,394,573, (now granted)</u>	<u>09/606,9996,622,923 (now granted)</u>

The disclosures of these co-pending applications are incorporated herein by reference.

Various methods, systems and apparatus relating to the present invention are disclosed in the following co-pending applications filed by the applicant or assignee of the present invention on 23 May 2000:

<u>09/575,197 (now pending)</u>	<u>09/575,195 (now pending)</u>	<u>09/575,159 (now pending)</u>
<u>09/575,132 (now pending)</u>	<u>09/575,123 (now pending)</u>	<u>09/575,148, (now pending)</u>
<u>09/575,130 (now pending)</u>	<u>09/575,165 (now pending)</u>	<u>09/575,153 (now pending)</u>
<u>09/575,118 (now pending)</u>	<u>09/575,131 (now pending)</u>	<u>09/575,116 (now pending)</u>
<u>09/575,144 (now pending)</u>	<u>09/575,139 (now pending)</u>	<u>09/575,186 (now pending)</u>
<u>09/575,1856,681,045, (now granted)</u>		<u>09/575,191 (now pending)</u>
<u>09/575,145 (now pending)</u>	<u>09/575,192 (now pending)</u>	<u>09/609,303 (now pending)</u>
<u>09/610,095 (now pending)</u>	<u>09/609,596 (now pending)</u>	<u>09/575,181 (now pending)</u>
<u>09/575,193 (now pending)</u>	<u>09/575,156 (now pending)</u>	<u>09/575,183 (now pending)</u>
<u>09/575,160 (now pending)</u>	<u>09/575,150 (now pending)</u>	<u>09/575,169 (now pending)</u>
<u>NPK007US (now abandoned)</u>		<u>09/575,1846,644,642, (now granted)</u>
<u>6,502,614 (now granted)</u>		

<u>09/575,1806,622,999, (now granted)</u>	<u>6,549,935 (now granted),</u>	<u>09/575,1496,669,385, (now granted),</u>
<u>NPN003US (now abandoned),</u>		<u>NPN002US (now abandoned),</u>
		<u>09/575,187 (now pending),</u>
	<u>NPP002US (now abandoned),</u>	
<u>09/575,155 (now pending),</u>	<u>6,591,884 (now granted),</u>	<u>6,439,706 (now granted),</u>
<u>09/575,196 (now pending),</u>	<u>09/575,198 (now pending),</u>	<u>09/575178 (now pending),</u>
<u>6,428,155 (now granted),</u>	<u>09/575,146 (now pending),</u>	<u>09/608,920 (now pending),</u>
<u>09/575,174 (now pending),</u>	<u>09/575,163 (now pending),</u>	<u>09/575,168 (now pending),</u>
<u>09/575,154 (now pending),</u>	<u>09/575,129 (now pending),</u>	<u>09/575,124 (now pending),</u>
<u>09/575,188 (now pending)</u>	<u>09/575,189 (now pending),</u>	<u>09/575,162 (now pending),</u>
<u>09/575,172 (now pending),</u>	<u>09/575,170 (now pending),</u>	<u>09/575,171 (now pending),</u>
<u>09/575,161 (now pending),</u>	<u>10/291,716, (now pending)</u>	<u>6,428,133 (now granted),</u>
<u>6,527,365 (now granted),</u>	<u>6,315,399 (now granted),</u>	<u>6,338,548 (now granted),</u>
<u>6,540,319 (now granted),</u>	<u>6,328,431 (now granted),</u>	<u>6,328,425 (now granted),</u>
<u>09/575,127 (now pending),</u>	<u>6,383,833 (now granted),</u>	<u>6,464,332 (now granted),</u>
<u>6,390,591 (now granted),</u>	<u>09/575,152 (now pending),</u>	<u>6,328,417 (now granted),</u>
<u>6,409,323 (now granted),</u>	<u>6,281,912 (now granted),</u>	<u>6,604,810 (now granted),</u>
<u>6,318,920 (now granted),</u>	<u>6,488,422 (now granted),</u>	<u>09/575,108 (now pending),</u>
<u>09/575,109 (now pending),</u>	<u>09/575,110 (now pending)</u>	

The disclosures of these co-pending applications are incorporated herein by reference.--

Please replace the paragraph beginning at page 11, lines 17-18, with the following amended paragraph:

Figures 19(a), 19(b) and 19(c) are a series of perspective views illustrating the operating cycle of the Memjet™ printing element shown in Figure 13;

Please replace the paragraph beginning at page 15, lines 19-26, with the following amended paragraph:

The netpage printer 601, a preferred form of which is shown in Figures 11, 12, 12a and to 13 and described in more detail below, is able to deliver, periodically or on demand, personalized newspapers, magazines, catalogs, brochures and other publications, all printed at high quality as interactive netpages. Unlike a personal computer, the netpage printer is an appliance which can be, for example, wall-mounted adjacent to an area where the morning news is first consumed, such as in a user's kitchen, near a breakfast table, or near the household's point of departure for the day. It also comes in tabletop, desktop, portable and miniature versions.

Please replace the paragraph beginning at page 20, lines 22-27, with the following amended paragraph:

Any suitable error-correcting code can be used in place of a (15, 5) Reed-

Solomon code, for example a Reed-Solomon code with more or less redundancy, with the same or different symbol and codeword sizes; another block code; or a different kind of code, such as a convolutional code (see, for example, Stephen B. Wicker, Error Control Systems for Digital Communication and Storage, Prentice-Hall 1995, the contents of which are herein incorporated by cross-reference).

Please replace the paragraph beginning at page 21, lines 2-6, with the following amended paragraph:

The physical representation of the tag, shown in Figure 5a, includes fixed target structures 15, 16, 17 and variable data areas 18a, 18b, 18c and 18d. The fixed target structures allow a sensing device such as the netpage pen to detect the tag and infer its three-dimensional orientation relative to the sensor. The data areas contain representations of the individual bits of the encoded tag data.

Please replace the paragraph beginning at page 30, lines 23-25, with the following amended paragraph:

The printer rasterizes and prints odd and even pages simultaneously on both sides of the sheet. It contains duplexed print engine controllers 760a and 760b and print engines utilizing Memjet™ printheads 350a and 350b for this purpose.

Please replace the paragraph beginning at page 41, lines 15-25, through to page 42, lines 1-3, with the following amended paragraph:

Figure 38 shows a flowchart of the process of handling pen input relative to a netpage. The process consists of receiving (at 884) a stroke from the pen; identifying (at 885) the page instance 830 to which the page ID 50 in the stroke refers; retrieving (at 886) the page description 5; identifying (at 887) a formatted element 835839 whose zone 58 the stroke intersects; determining (at 888) whether the formatted element corresponds to a field element, and if so appending (at 892) the received stroke to the digital ink of the field value 871, interpreting (at 893) the accumulated digital ink of the field, and determining (at 894) whether the field is part of a hyperlinked group 866 and if so activating (at 895) the associated hyperlink; if the field is not a part of a hyperlinked group 866 then the process returns to step 884; alternatively determining (at 889) whether the formatted element corresponds to a hyperlink element and if so activating (at 895) the corresponding hyperlink; alternatively, in the absence of an input field or hyperlink, appending (at 890) the received stroke to the digital ink of the background field 833; and copying (at 891) the received

stroke to the current selection 826 of the current pen, as maintained by the registration server.

Please replace the paragraph beginning at page 42, lines 4-16, with the following amended paragraph:

Figure 38a shows a detailed flowchart of step 893 in the process shown in Figure 38, where the accumulated digital ink of a field is interpreted according to the type of the field. The process consists of determining (at 896) whether the field is a checkbox and (at 897) whether the digital ink represents a checkmark, and if so assigning (at 898) a true value to the field value; if at step 896 the field is not a checkbox then the process continues at step 899; if at step 897 the digital ink does not represent a checkmark then the process continues to step 894; alternatively determining (at 899) whether the field is a text field and if so converting (at 900) the digital ink to computer text, with the help of the appropriate registration server, and assigning (at 901) the converted computer text to the field value; alternatively determining (at 902) whether the field is a signature field and if so verifying (at 903) the digital ink as the signature of the pen's owner; if it is determined at step 902 that the field is not a signature field then the process continues to step 894; with the help of the appropriate registration server, creating (at 904) a digital signature of the contents of the corresponding form, also with the help of the registration server and using the pen owner's private signature key relating to the corresponding application, and assigning (at 905) the digital signature to the field value.

Please replace the paragraph beginning at page 65, lines 17-22, with the following amended paragraph:

The page server uses the pen ID 61 to obtain the corresponding user ID 60 from the registration server 11, and then allocates a globally unique hyperlink request ID 52 and builds a hyperlink request 934. The hyperlink request class diagram is shown in Figure 41. The hyperlink request records the IDs of the requesting user 800 and printer 802, and identifies the clicked hyperlink instance 862. The page server then sends its own server ID 53, the hyperlink request ID, and the link ID to the application.

Please replace the paragraph beginning at page 70, line 30, through to page 71 lines 1-4, with the following amended paragraph:

The image sensor is a 215x215 pixel CCD (such a sensor is produced by Matsushita Electronic Corporation, and is described in a paper by Itakura, K T Nobusada, N

Okusenya, R Nagayoshi, and M Ozaki, "A 1mm 50k-Pixel IT CCD Image Sensor for Miniature Camera System", IEEE Transactions on Electronic Devices, Vol. Vol. 47, number 1, January 2000, which is incorporated herein by reference) with an IR filter.

Please replace the paragraph beginning at page 73, lines 29-31, through to page 74 lines 1-3, with the following amended paragraph:

The controlling processor handles communication with the network 19 and with local wireless netpage pens 101, senses the help button 617, controls the user interface LEDs 613-616, and feeds and synchronizes the RIP DSPs 757 and print engine controllers 760. It consists of a medium-performance general-purpose microprocessor. The controlling processor 750 communicates with the print engine controllers 760a and 760b via a high-speed serial bus 659, as shown in Figure 15.

Please replace the paragraphs beginning at page 76, lines 3-12, with the following amended paragraphs:

As shown in Figure 16, The page expansion and printing pipeline of the print engine controller 760 consists of a high speed IEEE 1394 serial interface 659, a standard JPEG decoder 763, a standard Group 4 Fax decoder 764, a custom halftoner/compositor unit 765, a custom tag encoder 766, a line loader/formatter unit 767, and a custom interface 768 to the Memjet™ printhead 350.

The print engine controller 360-760 operates in a double buffered manner. While one page is loaded into DRAM 769 via the high speed serial interface 659, the previously loaded page is read from DRAM 769 and passed through the print engine controller pipeline. Once the page has finished printing, the page just loaded is printed while another page is loaded.

Please replace the paragraph beginning at page 76, lines 26-28, with the following amended paragraph:

As shown in Figures 15 and 16, The print engine controllers 760, 760a and 760b contains a low-speed processors 772 for synchronizing the page expansion and rendering pipeline, configuring the printheads 350, 350a and 350b via a low-speed serial bus 773, and controlling the stepper motors 675, 676.

Please replace the paragraph beginning at page 80, lines 17-19, with the following amended paragraph:

Rather than accepting e-mail only from known contacts, a user 800 may choose to

bar individual users 1016. The barred user list 1017 records individuals from which the user refuses to accept e-mail.

Please add the words “We claim:” at the top of page 87, immediately following the word “CLAIMS”.